INFORMATION CITED BY APPLICANTS THAT MAY BE MATERIAL TO THE PROSECUTION OF THE SUBJECT APPLICATION

Applicants:

R.T. Moon et al.

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Title:

TRANSGENIC FISH AND BETA-CATENIN

SIGNALING PATHWAY MODEL

U.S. PATENT DOCUMENTS

*Examiner	r Cite No.	Document No.	Kind Code	Date (mm/dd/yyyy)	Name	
	_ U1	5,223,409	A	06/29/1993	Ladner et al.	

FOREIGN PATENT DOCUMENTS

None.

OTHER INFORMATION (Including Author, Title, Date, Pertinent Pages, Etc.)

*Examiner Initial	Cite No.	
	O1	Allen, N.D., et al., "Transgenes as Probes for Active Chromosomal Domains in Mouse Development," <i>Nature 333</i> (6176):852-855, June 30, 1988.
	O2	Amsterdam, A., and N. Hopkins, "Retrovirus-Mediated Insertional Mutagenesis in Zebrafish," <i>Methods in Cell Biol.</i> 60:87-98, 1999.
	О3	Bernhardt, R.R., et al, "Identification of Spinal Neurons in the Embryonic and Larval Zebrafish," <i>J. Comp. Neurol.</i> 302:603–616, 1990.
	O4	Billin, A.N., et al., "β-Catenin-Histone Deacetylase Interactions Regulate the Transition of LEF1 From a Transcriptional Repressor to an Activator," <i>Mol. Cell. Biol.</i> 20(18):6882–6890, September 2000.
	O5	Perrimon, N., and M. Boutros, " <i>Drosophila</i> Wnt/Fz Pathways," <i>Science's STKE</i> (Connections Map, as seen in May 2002). http://stke.sciencemag.org/cgi/cm/stkecm;CMP_6459
	O6	Bowerman, B., "C. elegans T Cell Polarity Wnt Pathway," Science's STKE (Connections Map, as seen March 2004), at least as early as May 2002.

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*Examiner Initial	Cite No.	
	O7	Bowerman, B., "C. elegans Gonadogenesis Wnt Pathway," Science's STKE (Connections Map, as seen March 2004), at least as early as May 2002. http://stke.sciencemag.org/cgi/cm/stkecm;CMP_10698
	O8	Bowerman, B., "C. elegans Endoderm Induction Wnt Pathway," Science's STKE (Connections Map, as seen March 2004), at least as early as May 2002. http://stke.sciencemag.org/cgi/cm/stkecm;CMP_6104 >
	O9	Bowerman, B., "C. elegans QL Neuroblast Migration Wnt Pathway," Science's STKE (Connections Map, as seen March 2004), at least as early as May 2002. http://stke.sciencemag.org/cgi/cm/stkecm;CMP_9763
	O10	Brannon, M., et al., "XCtBP is a XTcf-3 Co-Repressor With Roles Throughout <i>Xenopus</i> Development," <i>Development 126</i> :3159–3170, 1999.
	O11	Brannon, M., et al., "A β-Catenin/XTcf-3 Complex Binds to the <i>Siamois</i> Promoter to Regulate Dorsal Axis Specification in <i>Xenopus</i> ," <i>Genes Dev.</i> 11:2359–2370, 1997.
	O12	Bunin, B.A., and J.A. Ellman, "A General and Expedient Method for the Solid-Phase Synthesis of 1,4-Benzodiazepine Derivatives," <i>J. Am. Chem. Soc.</i> 114:10997-10998, December 1992.
	O13	Burgess, S., and N. Hopkins, "Use of Pseudotyped Retroviruses in Zebrafish as Genetic Tags," <i>Methods Enzymol.</i> 327:145-161, 2000.
	O14	Carell, T., et al., "A Novel Procedure for the Synthesis of Libraries Containing Small Organic Molecules," <i>Angew. Chem Int. Ed. Engl.</i> 33(20):2059-2061, 1994.
	O15	Carell, T., et al., "A Solution-Phase Screening Procedure for the Isolation of Active Compounds from a Library of Molecules," <i>Angew. Chem. Int. Ed. Engl.</i> 33(20):2061-2064, 1994.
	O16	Christian, J.L., et al., "Xwnt-8, a Xenopus Wnt-1/int-1-Related Gene Responsive to Mesoderm-Inducing Growth Factors, May Play a Role in Ventral Mesodermal Patterning During Embryogenesis," Development 111:1045–1055, 1991.
	O17	Cho, C.Y., et al., "An Unnatural Biopolymer," <i>Science 261</i> :1303-1305, September 3, 1993. http://links.jstor.org/sici?sici=0036-8075%2819930903%3A261%3A5126%3C1303%3AAUB%3E2.0.CO%3B2-5

*Examiner Initial	Cite No.	
	O18	Cull, M.G., et al., "Screening for Receptor Ligands Using Large Libraries of Peptides Linked to the C Terminus of the lac Repressor," <i>Proc. Natl. Acad. Sci. USA 89</i> (5):1865-1869, March 1, 1992. < http://links.jstor.org/sici?sici=0027-8424%2819920301%2989%3A5%3C1865%3ASFRLUL%3E2.0.CO%3B2-2
	O19	Culp, P., et al., "High-Frequency Germ-Line Transmission of Plasmid DNA Sequences Injected Into Fertilized Zebrafish Eggs," <i>Proc. Natl. Acad. Sci. USA</i> 88(18):7953-7957, September 15, 1991. < http://links.jstor.org/sici?sici=0027-8424%2819910915%2988%3A18%3C7953%3AHGTOPD%3E2.0.CO%3B2-T
	O20	Cwirla, S.E., et al., <i>Proc. Natl. Acad. Sci. USA 87</i> (16):6378-6382, August 1990. < http://links.jstor.org/sici?sici=0027-8424%28199008%2987%3A16%3C6378%3APOPAVL%3E2.0.CO%3B2-3>
	O21	Devlin, J.J., et al., "Random Peptide Libraries: A Source of Specific Protein Binding Molecules," <i>Science 249</i> (4967):404-406, July 27, 1990. < http://links.jstor.org/sici?sici=0036-8075%2819900727%293%3A249%3A4967%3C404%3ARPLASO%3E2.0.CO%3B2-4
	O22	DeWitt, S.H., et al., "'Diversomers': An Approach to Nonpeptide, Nonoligomeric Chemical Diversity," <i>Proc. Natl. Acad. Sci. USA</i> 90(15):6909-6913, August 1, 1993. < 2-3>
	O23	Dickinson, M.E., et al., "Dorsalization of the Neural Tube by the Non-Neural Ectoderm," <i>Development 121</i> :2099–2106, 1995.
	O24	Dorsky, R.I., et al., "Control of Neural Crest Cell Fate by the Wnt Signalling Pathway," <i>Nature 396</i> :370–373, November 26, 1998.
	O25	Dorsky, R.I., et al., "Maternal and Embryonic Expression of Zebrafish <i>lef1</i> ," <i>Mech. Dev.</i> 86:147–150, 1999.
<u></u>	O26	Dorsky, R.I., et al., "Direct Regulation of <i>Nacre</i> , a Zebrafish <i>MITF</i> Homolog Required for Pigment Cell Formation, by the Wnt Pathway," <i>Genes Dev.</i> 14:158–162, 2000.
	O27	Driever, W., et al., "A Genetic Screen for Mutations Affecting Embryogenesis in Zebrafish," <i>Development 123</i> :37-46, 1996.
	O28	Eastman, Q., and R. Grosschedl, "Regulation of LEF-1/TCF Transcription Factors by Wnt and Other Signals," <i>Curr. Opin. Cell Biol.</i> 11:233–240, 1999.

*Examiner Initial	Cite No.	
	O29	Erb, E., et al., "Recursive Deconvolution of Combinatorial Chemical Libraries," <i>Proc. Natl. Acad. Sci. USA 91</i> (24):11422-11426, November 22, 1994. < http://links.jstor.org/sici?sici=0027-8424%2819941122%2991%3A24%3C11422%3ARDOCCL%3E2.0.CO%3B-2-L
	O30	Felici, F., et al., "Selection of Antibody Ligands From a Large Library of Oligopeptides Expressed on a Multivalent Exposition Vector," <i>J. Mol. Biol.</i> 222:301-310, 1991.
	O31	Fodor, S.P.A., et al., "Multiplexed Biochemical Assays With Biological Chips," <i>Nature 364</i> :555-556, August 5, 1993.
	O32	Galceran, J., et al., "Wnt3a-/Like Phenotype and Limb Deficiency in Lef1-/-Tcf1-/- Mice," Genes Dev. 13:709-717, 1999.
	O33	Gallop, M.A., et al., "Applications of Combinatorial Technologies to Drug Discovery," <i>J. Med. Chem.</i> 37(9):1233-1251, April 29, 1994.
	O34	Golling, G., et al., "Insertional Mutagenesis in Zebrafish Rapidly Identifies Genes Essential for Early Vertebrate Development," <i>Nat. Genet.</i> 31:135-140, June 2002.
	O35	Gong, Y., et al., "LDL Receptor-Related Protein 5 (LRP5) Affects Bone Accrual and Eye Development," <i>Cell</i> 107:513-523, November 16, 2001.
	O36	Gossler, A., et al., "Mouse Embryonic Stem Cells and Reporter Constructs to Detect Developmentally Regulated Genes," <i>Science</i> , New Series, 244(4903):463-465, April 28, 1989. < http://links.jstor.org/sici?sici=0036-8075%2819890428%293%3A244%3A4903%3C463%3AMESCAR%3E2.0.C O%3B2-1>
	O37	Haffter, P., et al., "The Identification of Genes With Unique and Essential Functions in the Development of the Zebrafish, <i>Danio rerio</i> ," <i>Development 123</i> :1-36, 1996.
	O38	Halloran, M.C., et al., "Laser-Induced Gene Expression in Specific Cells of Transgenic Zebrafish," <i>Development 127</i> :1953–1960, 2000.
	O39	Heasman, J., et al., "Overexpression of Cadherins and Underexpression of β-Catenin Inhibit Dorsal Mesoderm Induction in Early <i>Xenopus</i> Embryos," <i>Cell</i> 79:791–803, December 2, 1994.
	O40	Heikkilä, M., et al., "Wnts and the Female Reproductive System," J. Exp. Zool. 290:616-623, 2001.

*Examiner Initial	Cite No.	
	O41	Hinck, L., et al., "Wnt-1 Modulates Cell-Cell Adhesion in Mammalian Cells by Stabilizing β-Catenin Binding to the Cell Adhesion Protein Cadherin," <i>J. Cell Biol.</i> 124(5):729-741, 1994.
	O42	Hollyday, M., et al., "Wnt Expression Patterns in Chick Embryo Nervous System," Mech. Dev. 52:9–25, 1995.
	O43	Horwell, D., et al., "'Targeted' Molecular Diversity: Design and Development of Non-Peptide Antagonists for Cholecystokinin and Tachykinin Receptors," <i>Immunopharmacol.</i> 33:68-72, 1996.
	O44	Houghten, R.A., et al., "The Use of Synthetic Peptide Combinatorial Libraries for the Identification of Bioactive Peptides," <i>BioTechniques</i> 13(3):412-421, September 1992.
	O45	Hug, B., et al., "tbx6, a Brachyury-Related Gene Expressed by Ventral Mesendodermal Precursors in the Zebrafish Embryo," Dev. Biol. 183:61–73, 1997.
	O46	Ikeya, M., et al., "Wnt Signalling Required for Expansion of Neural Crest and CNS Progenitors," <i>Nature 389</i> :966–970, October 30, 1997.
	O47	Imai, Y., et al., "Analysis of Chromosomal Rearrangements Induced by Postmeiotic Mutagenesis With Ethylnitrosourea in Zebrafish," <i>Genetics</i> 155:261-272, May 2000.
	O48	Inoue, K., et al., "Electroporation as a New Technique for Producing Transgenic Fish," <i>Cell. Differ. Develop. 29</i> (2):123-128, 1990.
	O49	Ishikawa, T., et al., "Mouse Wnt Receptor Gene <i>Fzd5</i> is Essential for Yolk Sac and Placental Angiogenesis," <i>Development 128</i> :25-33, 2001.
	O50	Kelly, C., et al., "Maternally Controlled β-Catenin-Mediated Signaling is Required for Organizer Formation in the Zebrafish," <i>Development</i> 127:3899-3911, 2000.
	O51	Kim, CH., et al., "Repressor Activity of Headless/Tcf3 is Essential for Vertebrate Head Formation," <i>Nature 407</i> :913–916, October 19, 2000.
	O52	Kimmel, C.B., "Genetics and Early Development of Zebrafish," <i>Trends Genet.</i> 5(8):283-288, August 1989.
	O53	Korinek, V., et al., Constitutive Transcriptional Activation by a β -Catenin-Tcf Complex in APC\$ $\{-^{l-}\}$ \$ Colon Carcinoma," <i>Science</i> , New Series, 275(5307):1784–1787, March 21, 1997.

*Examiner Initial	Cite No.	
	O54	Kothary, R., et al., "A Transgene Containing <i>lacZ</i> Inserted Into the <i>Dystonia</i> Locus is Expressed in Neural Tube," <i>Nature 335</i> :435-437, September 29, 1988.
	O55	Krauss, S., et al., "Expression of the Zebrafish Paired box Gene pax[zf-b] During Early Neurogenesis," <i>Development 113</i> :1193–1206, 1991.
	O56	Lam, K.S., "Application of Combinatorial Library Methods in Cancer Research and Drug Discovery," <i>Anti-Cancer Drug Des. 12</i> :145-167, 1997.
	O57	Lam, K.S., et al., "A new Type of Synthetic Peptide Library for Identifying Ligand-Binding Activity," <i>Nature 354</i> :82-84, November 7, 1991.
	O58	Lekven, A.C., et al., "Zebrafish wnt8 Encodes Two Wnt8 Proteins on a Bicistronic Transcript and is Required for Mesoderm and Neurectoderm Patterning," Dev. Cell 1:103–114, July 2001.
	O59	Little, R.D., et al., "A Mutation in the LDL Receptor-Related Protein 5 Gene Results in the Autosomal Dominant High-Bone-Mass Trait," Am. J. Hum. Genet. 70:11-19, 2002.
	O60	Liu, J., et al., "Siah-1 Mediates a Novel β-Catenin Degradation Pathway Linking p53 to the Adenomatous Polyposis Coli Protein," <i>Mol. Cell</i> 7:927–936, May 2001.
	O61	Martin, G., "Making a Vertebrate Limb: New Players Enter From the Wings," <i>BioEssays 23</i> :865-868, 2001.
	O62	Matsuzawa, SI., and J.C. Reed, "Siah-1, SIP, and Ebi Collaborate in a Novel Pathway for β-Catenin Degradation Linked to p53 Responses," <i>Mol. Cell</i> 7:915–926, 2001.
	O63	McMahon, A P., and A. Bradley, "The <i>Wnt-1</i> (<i>int-1</i>) Proto-Oncogene is Required for Development of a Large Region of the Mouse Brain," <i>Cell</i> 62:1073–1085, September 21, 1990.
	O64	Megason, S.G, and A.P. McMahon, "A Mitogen Gradient of Dorsal Midline Wnts Organizes Growth in the CNS," <i>Development 129</i> :2087-2098, 2002.
	O65	Moon, R.T., "Wnt/Beta-Catenin Pathway," <i>Science's STKE</i> (Connections Map, as seen in March 2004), at least as early as May 2002. http://stke.sciencemag.org/cgi/cm/stkecm;CMP_5533
	O66	Moon, R.T., "Xenopus Egg Wnt/Beta-Catenin Pathway," Science's STKE (Connections Map, as seen March 2004), at least as early as May 2002. http://stke.sciencemag.org/cgi/cm/stkecm;CMP_6031

*Examiner Initial	Cite No.	
	O67	Moon, R.T., et al., "The Promise and Perils of Wnt Signaling Through β-Catenin," <i>Science 296</i> :1644-1646, 2002.
	O68	Müller, F., et al., "Introducing Foreign Genes into Fish Eggs With Electroporated Sperm as a Carrier," <i>Mol. Mar. Biol. Biotechnol.</i> 1(4/5):276-281, 1992.
	O69	Müller, F., et al., "Efficient Transient Expression System Based on Square Pulse Electroporation and <i>in vivo</i> Luciferase Assay of Fertilized Fish Eggs," <i>FEBS Letters 324</i> (1):27-32, June 1993.
	O70	Murakami, Y., et al., "Micromachined Electroporation System for Transgenic Fish," <i>J. Biotechnol.</i> 34:35-42, 1994.
	O71	Novak, A., et al., "Cell Adhesion and the Integrin-Linked Kinase Regulate the LEF-1 and \$\beta \$-Catenin Signaling Pathways," <i>Proc. Natl. Acad. Sci. USA 95</i> (8):4374–4379, April 14, 1998. < http://links.jstor.org/sici?sici=0027-8424%2819980414%2995%3A8%3C4374%3ACAATIK%3E2.0.CO%3B2-O
	O72	O'Kane, C.J., and W.J. Gehring, "Detection <i>in situ</i> of Genomic Regulatory Elements in Drosophila," <i>Proc. Natl. Acad. Sci. USA 84</i> (24):9123-9127, December 15, 1987. < http://links.jstor.org/sici?sici=0027-8424%2819871215%2984%3A24%3C9123%3ADISOGR%3E2.0CO%3B2-O
	O73	Oxtoby, E., and T. Jowett, "Cloning of the Zebrafish <i>krox-20</i> Gene (<i>krx-20</i>) and its Expression During Hindbrain Development," <i>Nucleic Acids Res.</i> 21(5):1087-1095, 1993.
	O74	Pelegri, F., and HM. Maischein, "Function of Zebrafish β-Catenin and TCF-3 in Dorsoventral Patterning," <i>Mech. Dev.</i> 77:63–74, 1998.
	O75	Polakis, P., "Wnt Signaling and Cancer," Genes Dev. 14:1837-1851, 2000.
	O76	Riley, B.B., and D.J. Grunwald, "Efficient Induction of Point Mutations Allowing Recovery of Specific Locus Mutations in Zebrafish," <i>Proc. Natl. Acad. Sci. USA 92</i> :5997-6001, June 1995.
	O77	Roose, J., et al., "The <i>Xenopus Wnt</i> Effector XTcf-3 Interacts With Groucho-Related Transcriptional Repressors," <i>Nature 395</i> :608–612, October 8, 1998.
	O78	Ross, S.E., et al., "Inhibition of Adipogenesis by Wnt Signaling," <i>Science</i> 289:950-953, August 11, 2000.

*Examiner Initial	Cite No.	
	O79	Ryu, SL., et al., "Regulation of <i>dharma/bozozok</i> by the Wnt Pathway," <i>Dev. Biol. 231</i> :397–409, 2001.
	O80	Schneider, S., et al., " β -Catenin Translocation Into Nuclei Demarcates the Dorsalizing Centers in Frog and Fish Embryos," <i>Mech. Dev.</i> 57:191–198, 1996.
	O81	Scott, J.K, and G.P. Smith, "Searching for Peptide Ligands With an Epitope Library," <i>Science</i> , New Series, <i>249</i> (4967):386-390, July 27, 1990. < http://links.jstor.org/sici?sici=0036-8075%2819900727%293%3A249%3A4967%3C386%3ASFPLWA%3E2.0.C O%3B2-9>
	O82	Sharpe, C., et al., "Wnt Signalling: A Theme With Nuclear Variations," <i>BioEssays 23</i> :311–318, 2001.
	O83	Streisinger, G., "Attainment of Minimal Biological Variability and Measurements of Genotoxicity: Production of Homozygous Diploid Zebra Fish," <i>Natl. Cancer Inst. Monogr. 65</i> , NIH Publication No. 84-2653, Bethesda, Maryland, 1984, pp. 53-58.
	O84	Symonds, J.E., et al., "Electroporation of Salmon Sperm With Plasmid DNA: Evidence of Enhanced Sperm/DNA Association," <i>Aquaculture 119</i> (11):313-327, 1994.
	O85	Szelei, J., et al., "Liposome-Mediated Gene Transfer in Fish Embryos," Transgenic Res. 3(2):116-119, March 1994.
	O86	Taipale, J., and P.A. Beachy, "The Hedgehog and Wnt Signalling Pathways in Cancer," <i>Nature 411</i> :349-354, May 17, 2001.
	O87	Takada, S., et al., "Wnt-3a Regulates Somite and Tailbud Formation in the Mouse Embryo," Genes Dev. 8:174–189, January 1994.
	O88	Turner, D.L., and H. Weintraub, "Expression of Achaete-Scute Homolog 3 in <i>Xenopus</i> Embryos Converts Ectodermal Cells to a Neural Fate," <i>Genes Dev.</i> 8:1434–1447, June 1994.
	O89	Waterman, M.L., et al., "A Thymus-Specific Member of the HMG Protein Family Regulates the Human T Cell Receptor Cα Enhancer," <i>Genes Dev.</i> 5:656–669, April 1991.
	O90	Widlund, H.R., et al., "β-Catenin-Induced Melanoma Growth Requires the Downstream Target <i>Microphthalmia</i> -Associated Transcription Factor," <i>J. Cell Biol.</i> 158:1079-1087, November 6, 2002.

*Examiner Initial	No.	
	O91	Wilkinson, D.G., et al., "Expression of the Proto-Oncogene <i>int-1</i> is Restricted to Specific Neural Cells in the Developing Mouse Embryo," <i>Cell 50:79</i> –88, July 3, 1987.
	O92	Wright, M., et al., "Identification of a <i>Wnt</i> -Responsive Signal Transduction Pathway in Primary Endothelial Cells," <i>Biochem. Biophys. Res. Commun.</i> 263(2):384-388, 1999.
	O93	Zelenin, A.V., et al., "The Delivery of Foreign Genes Into Fertilized Fish Eggs Using High-Velocity Microprojectiles," <i>FEBS Letters</i> 287(1/2):118-120, August 1991.
	O94	Zuckermann, R.N., et al., "Discovery of Nanomolar Ligands for 7-Transmembrane G-Protein-Coupled Receptors From a Diverse <i>N</i> -(Substituted)Glycine Peptoid Library," <i>J. Med. Chem.</i> 37(17):2678-2685, 1994.
Exan	niner	Date Considered

*Examiner: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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